Clean Harbors Aragonite, LLC

CEM CALIBRATION DRIFT DATA SHEET

CEM# **DATE:**

Signature: _____

Start Time: _____

End Time: _____

Reviewed by:
Date:

	Calibration Gas Concentration	mA Reading (Zero)	% or ppm (Zero)	mA Reading (Span)	% or ppm (Span)	Instrument Drift (Zero)	Instrument Drift (Span)	mA Reading (Zero) after calibration	% or ppm (Zero) after Calibration	mA Reading (Span) after calibration	% or ppm (Span) after Calibration
CO2											
CO low											
CO high											
O2											
NOx											

Daily Operating Drift Limits (Recalibrate when exceeded)

CO2	0.50%
CO low	6 ppm
CO high	60 ppm
O2	0.50%
NOx	50 ppm

5-day Out-of-Control Drift limits **
contact Instrumentation Supervisor

CO2	1.00%
CO low	20 ppm
CO high	200 ppm
O2	1.00%
NOx	50 ppm

** instrument is out of control when these limits are exceeded for 5 consecutive days

Daily Out-of-Control Drift Limits ***
see note 7.

CO2	2.00%
CO low	40 ppm
CO high	400 ppm
O2	2.00%
NOx	100 ppm

*** instrument is out of control when these limits are exceeded

Instrument scale ranges are:

CO2	0 - 20 %
CO low (A)	0 - 200 ppm
CO high (B)	0 - 2000 ppm
O2	0 - 25 %
NOx	0 - 1000 ppm

INSTRUCTIONS

1. enter cal gas concentrations on form
2. introduce zero gas and record mA reading, for each instrument
3. calculate instrument zero response as % (or ppm) = (mA - 4)/16 x instrument scale, and enter value, for each instrument
4. introduce span gas and record mA reading, for each instrument
5. calculate instrument span response as % (or ppm) = (mA - 4)/16 x instrument scale, and enter value, for each instrument
6. recalibrate if the Daily Operating Drift Limits are exceeded, and enter recalibrated zero and span values (mA and % or ppm) on form.
7. notify Maintenance Manager or his / her designee immediately if daily Out-of-Control Drift Limits are exceeded.

COMMENTS:

revision date: December 16, 2002